

(12) INTERNATIONAL APPLICATION PUBLISHED PURSUANT TO THE
INTERNATIONAL PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International publication date:
number:
Sept. 29, 2005 (29.09.2005) PCT **WO 2005/091438 A1**

(51) International Patent Classification⁷: H01Q 23/00, 13/02, 13/18, 21/00 (74) Attorneys: HENGELHAUPT, Jürgen, D. etc.; Guido Hengelhaupt Ziebig & Schneider, Wallstr. 58/59, 10179 Berlin (DE).

(21) International File No.: PCT/EP2005/003303 (81) Contractual states (*unless otherwise specified, for every available type of national intellectual property right*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International application date:
March 16, 2005 (16.03.2005) (84) Contractual states (*unless otherwise specified, for every available type of national intellectual property right*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,

(25) Language of submission: German

(26) Language of publication: German

(30) Priority data:
10 2004 014 018.9 March 19, 2004
(19.03.2004) DE

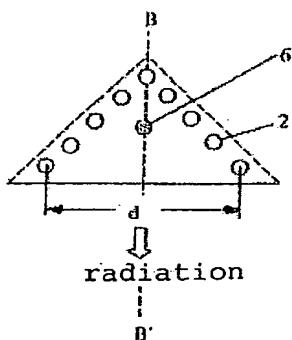
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(54) Title: MICROWAVE ANTENNA FOR FLIP-CHIP SEMICONDUCTOR MODULES

(57) The invention relates to a microwave antenna for flip-chip semiconductor modules, comprising two semiconductor substrates which are metallized on the surface thereof. Patch antennas, i.e. metallized flat areas which are insulated from the rest of the circuit on an outer surface of a module with a supply line to the circuit, are already known per se. They result in vertical radiation at a relatively large angle. According to the invention, a closed group of bumps are arranged in such a way that the distance of the bumps (2) to each other is less than the half wavelength ($\lambda / 2$) of the microsignal which is to be radiated or received and an open radiation slot arises in at least one pair of side walls (3,4) of the semiconductor substrates (a, b) and a bump (6), which is connected to the circuit of the semiconductor module, is arranged between the bumps (2) and the radiation slot, enabling the microwave antenna to be excited.



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[barcode]

PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international research report*
- *prior to the expiry of the deadline for modification of the claims; publication will be repeated if modifications arise*

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